

## **Data Description for Finfish Monitoring Data**

### **General:**

The Louisiana Department of Wildlife and Fisheries generates these data on a regular schedule by means of samples with seines, gill nets, and trammel nets at 18 locations in Breton Sound.

The seines are 50-foot nylon bag seines with  $\frac{1}{4}$  inch bar mesh. In rare instances, samples were taken using a 100-foot bag seine. The gill nets measure 6 by 750 feet and comprise a linear sequence of five 150-foot sections, each section having a progressively larger mesh size: 1, 1.25, 1.5, 1.75 and 2 inch bar mesh. The trammel nets measure 750 feet in length and consist of a  $1\frac{5}{8}$  inch inner net with 6 inch outer nets.

Each record includes physical and meteorological measurements coincident with the sample.

Finfish in the sample are identified and counted. Abundance permitting, fifty randomly-selected individuals of each species are measured.

### **Data Column Descriptions:**

*Station:* Map 2003-04-122.pdf shows the location of the sampling stations. Table 1 gives their locations. The data set contains additional samples taken at the isohaline stations shown in Map2003-04-122.pdf. These locations are given in Table 2. Finfish Station 251 is distinct from Isohaline Station 251. Isohaline Stations 251 and 52 have been renamed 351 and 352, respectively. All stations in Table 2 with redundant or inconsistent numbers have been identified with an asterisk superscript (\*).

**Table 1. Main Finfish Sampling Stations**

<b>Station Number</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Net Type</b>
202	29° 45' 42"	89° 49' 00"	Gill Net
203	29° 42' 24"	89° 53' 18"	Gill Net
206	29° 41' 03"	89° 41' 36"	Gill Net
209	29° 36' 42"	89° 41' 30"	Gill Net
212	29° 37' 42"	89° 35' 42"	Gill Net
213	29° 30' 00"	89° 32' 18"	Gill Net
221	29° 47' 00"	89° 51' 00"	Trammel Net
225	29° 40' 15"	89° 47' 48"	Trammel Net
226	29° 41' 03"	89° 41' 36"	Trammel Net
228	29° 36' 06"	89° 46' 40"	Trammel Net
231	29° 35' 46"	89° 37' 18"	Trammel Net
234	29° 32' 00"	89° 36' 00"	Trammel Net
242	29° 45' 42"	89° 49' 00"	Seine
244	29° 38' 54"	89° 50' 24"	Seine
250	29° 36' 12"	89° 44' 54"	Seine
251	29° 35' 46"	89° 37' 18"	Seine
253	29° 32' 12"	89° 32' 00"	Seine
255	29° 38' 00"	89° 47' 36"	Seine

**Table 2. Isohaline Sampling Stations**

Station Number	Latitude	Longitude	Net Type
002	29° 34' 12"	89° 38' 36"	
052*	29° 35' 49"	89° 38' 33"	
251*	29° 31' 39"	89° 37' 16"	
338	29° 38' 12"	89° 34' 00"	
339	29° 38' 18"	89° 31' 00"	
340	29° 40' 10"	89° 30' 40"	
346	29° 35' 54"	89° 37' 12"	
347	29° 36' 24"	89° 34' 06"	
348	29° 36' 42"	89° 32' 00"	Seine
349	29° 37' 18"	89° 29' 12"	Gill Net
351*	29° 31' 39"	89° 37' 16"	Seine
352*	29° 35' 49"	89° 38' 33"	
354	29° 34' 48"	89° 36' 18"	
355	29° 34' 42"	89° 33' 42"	
356	29° 33' 00"	89° 31' 48"	
357	29° 33' 48"	89° 29' 00"	
362	29° 31' 22"	89° 33' 23"	
363	29° 31' 24"	89° 30' 48"	
364	29° 29' 54"	89° 28' 46"	
368	29° 29' 54"	89° 34' 03"	
369	29° 28' 00"	89° 32' 29"	
370	29° 27' 41"	89° 29' 14"	
374	29° 26' 45"	89° 31' 37"	
375	29° 25' 36"	89° 30' 24"	

*Date:* mm/dd/yyyy

*Time:* 24-hour scale (military)

*Taxa:* Identifies the fish caught by common (not scientific) name.

*Total Number Caught:* LDWF report the number caught either by exact count or by estimation based on volume or weight.

*Total Caught Method:* Describes method of estimating this number based on count, volume, or weight.

*Number Measured:* Abundance permitting, fifty randomly-selected individuals of each species are measured.

*Sex:* Recorded as male, female, or indeterminate.

*Individual Weight:* Weight of individual specimen in ounces.

*Individual Weight Method (units):* This column reports method of weight estimation and units used.

*Gonad Weight:* Reported in grams. Gonad weight is measured mainly for striped mullet.

*Gonad Method:* Reports the method of estimating gonad weight, e.g. “experiential estimate,” or “precise weight of complete sample”.

*Total Sample Weight:* The total sample consists of what was recovered from each gear type in one sampling event. For example, two menhaden caught in a one-inch mesh gill net would be totalled together, but not with a third fish of that species caught at the same time in a two-inch net. When *Total Sample Weight*=0, this means that no weight was taken, even though some fish were caught. Total weight is reported in the same units used for individual weight.

*Total Weight Method:* Reports the method of estimating total sample weight and gives units, mainly ounces.

*Individual Length:* Recorded in millimeters. Method of measurement reported in *Length Method*.

*Length Interval:* All entries prior to December 2002 have been recorded as *Length Interval*=0, meaning that the units for the number in the variable *Individual Length* is millimeters and not some multiple of a larger number.

*Length Method:* Reports the units and method for measuring length of an individual specimen (either total length in millimeters or standard length in millimeters). Total length reports the distance from head to the tip of the tail, while standard length reports distance from head to the caudal peduncle.

*Depth of Sample (meters):* Reports the depth of the bottom of the net.

*Stomach Contents 1-5:* Game fish, mainly spotted seatrout and red drum, are dissected and examined for stomach contents. The record may contain up to five entries, one entry for each prey species found in stomach. Example: Five menhaden, two mullet, and one brown shrimp are found in a stomach. The event is recorded as: *Stomach Contents 1* = ‘menhaden’, *Stomach Contents 2* = ‘mullet’, *Stomach Contents 3* = ‘brown shrimp’, *Stomach Contents 4* = ‘ ’, and *Stomach Contents 5* = ‘ ’.

*Maturity Stage:* These classifications apply mainly to spotted sea trout and blue crabs: immature, resting stage, partial development (vitellogenesis), ripe development (gravid, mature), and spent.

*Stage Method:* Reports the method of determining sexual maturity, either by histological analysis or by gross observation.

*Gear Type:* Reports the design and dimensions of the gill nets, trammel nets, and seines used in sampling.

*Gear Observation:* Reports any problems or notable details of the sampling equipment, e.g. “sample lost/destroyed” or “sampling precluded”.

*Specimen Observation:* Reports any notable details of the specimen(s), e.g. “observed in sample without counting/measuring,” or “organism dead prior to sampling”.

*LDWF Project:* Reports which project the net sampling served. All entries prior to May of 2002 are “Marine Finfish Fishery-Independent Monitoring”.

*LDWF Special Project Code:* Identifies sub-projects, when applicable. Up to May, 2002, all sub-projects reported have merely repeated the entry for *LDWF Coastal Study Area*.

*LDWF Coastal Study Area:* All of these data are coded “2” indicating the area of the Caernarvon Diversion (Breton Sound).

*Bottom Water Temperature (C):* Field measurement of bottom water temperature in degrees Celsius.

*Surface Water Temperature (C):* Field measurement of surface water temperature in degrees Celsius.

*Water Temperature Sampling Method:* Reports equipment used for field measurement.

*Bottom Specific Conductance (mS/cm):* Millisiemens per centimeter.

*Surface Specific Conductance (mS/cm):* Millisiemens per centimeter.

*Conductivity Sampling Method:* Reports equipment used for field measurement.

*Bottom Salinity (ppt):* Parts per thousand, or milligrams per liter.

*Surface Salinity (ppt):* Parts per thousand, or milligrams per liter.

*Salinity Sampling Method:* Reports equipment used for field measurement.

*Air Temperature (C):* Field measurement of air temperature in degrees Celsius.

*Air Temperature Sampling Method:* Reports equipment used for field measurement.

*Turbidity:* Turbidity is in inverse proportion to this measurement, which is visibility measured in feet.

*Turbidity Sampling Method:* Field method for measuring turbidity, mainly by Secchi disc.

*Wind Direction:* Compass bearing in degrees.

*Wind Speed:* Reported in knots.

*Wind Sampling Method:* Field method for estimating wind speed.

*Tide Stage:* From 1988 through 1990, tide stages were recorded as “+”, “-”, or “S”, indicating, respectively, “rising”, “falling”, and “slack”. Beginning in 1991, these additional categories were recorded: low rising, mid rising, high rising, high standing, high falling, mid falling, and low falling.

*Tide Method:* In all cases, this is done by experiential estimate.

*Seastate:* Wave amplitude, in feet, measured crest to trough.

*Percent Cloud Cover:* Field estimate.